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**NORTH ATLANTIC TREATY ORGANIZATION  
ORGANISATION DU TRAITE DE L'ATLANTIQUE NORD**

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ARMY BOARD

MAS(ARMY)076-EOD/2389  
22 March 1994

To : Army Board Distribution List No. 5

Subject : STANAG 2389 EOD (EDITION 1)(AMENDMENT 2) - MINIMUM  
STANDARDS OF PROFICIENCY FOR TRAINED EXPLOSIVE  
ORDNANCE DISPOSAL PERSONNEL

Reference : MAS(ARMY)210-EOD/2389 dated 14 December 1987 (Edition 1)

Enclosure : Revised ratification/implementation details

1. The subject STANAG was promulgated by the document at reference.  
Addressees are requested to amend the STANAG as follows:

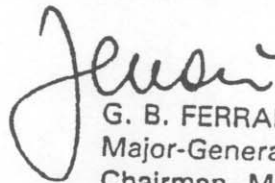
- a. Insert the word "former" before the phrase "Warsaw Pact" (so that it reads "former Warsaw Pact") in these places:

Page A-1, paragraph 7;  
Page B-2, paragraph 22;  
Page D-2, paragraph 24;

- b. Destroy the existing pages iii/iv and substitute the revised ones attached.

2. AAP-4 should be amended to reflect the latest status of the STANAG.

3. The Army Board, MAS, considers this an editorial amendment to the STANAG; previous ratifying references and implementation details are deemed to be valid.



G. B. FERRARI  
Major-General, ITAF  
Chairman, MAS

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ORGANISATION DU TRAITE DE L'ATLANTIQUE NORD

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~~(This letter is downgraded to NATO UNCLASSIFIED when separated from Enclosure)~~

MAS(ARMY)210-EOD/2389

14 December 1987

To : See distribution overleaf

Subject : STANAG 2389 EOD (EDITION 1) - MINIMUM STANDARDS OF PROFICIENCY  
FOR TRAINED EXPLOSIVE ORDNANCE DISPOSAL PERSONNEL

Reference : MAS(ARMY)506-EOD/2389 of 2 December 1985 (Edition 1)  
(1st Draft)

Enclosure : STANAG 2389 (Edition 1)

1. The enclosed NATO Standardization Agreement which has been ratified by nations as reflected in page iii is promulgated herewith.
2. The reference listed above is to be destroyed in accordance with local document destruction procedures.
3. AAP-4 should be amended to reflect the latest status of the STANAG.

ACTION BY NATIONAL STAFFS

4. National staffs are requested to examine page iii of the STANAG and if they have not already done so, advise the Army Board, MAS, through their national delegation as appropriate of their intention regarding its ratification and implementation.

*A. J. Melo Correia*

A.J. MELO CORREIA  
Major-General, POAF  
Chairman, MAS

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STANAG No. 2389  
(Edition 1 )

NORTH ATLANTIC TREATY ORGANIZATION  
(NATO)



MILITARY AGENCY FOR STANDARDIZATION  
(MAS)

STANDARDIZATION AGREEMENT  
(STANAG)

SUBJECT : MINIMUM STANDARDS OF PROFICIENCY FOR TRAINED EXPLOSIVE  
ORDNANCE DISPOSAL PERSONNEL

Promulgated on 14 December 1987

*A. J. Melo Correia*  
A.J. MELO CORREIA  
Major-General, POAF  
Chairman, MAS

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RECORD OF AMENDMENTS

No.	Reference/date of amendment	Date entered	Signature
2	March 22 1994	Nov 99	mju
3	Dec 15 1994	Nov 94	mju

EXPLANATORY NOTES

AGREEMENT

1. This NATO Standardization Agreement (STANAG) is promulgated by the Chairman MAS under the authority vested in him by the NATO Military Committee.
2. No departure may be made from the agreement without consultation with the tasking authority. Nations may propose changes at any time to the tasking authority where they will be processed in the same manner as the original agreement.
3. Ratifying nations have agreed that national orders, manuals and instructions implementing this STANAG will include a reference to the STANAG number for purposes of identification.

DEFINITIONS

4. Ratification is "The declaration by which a nation formally accepts the content of this Standardization Agreement".
5. Implementation is "The fulfilment by a nation of its obligations under this Standardization Agreement".
6. Reservation is "The stated qualification by a nation which describes that part of this Standardization Agreement which it cannot implement or can implement only with limitations".

RATIFICATION, IMPLEMENTATION AND RESERVATIONS

7. Page iii gives the details of ratification and implementation of this agreement. If no details are shown it signifies that the nation has not yet notified the tasking authority of its intentions. Page iv (and subsequent) gives details of reservations and proprietary rights that have been stated.

Agreed English/French texts

STANAG 2389  
(Edition 1)

NAVY/ARMY/AIR

NATO STANDARDIZATION AGREEMENT  
(STANAG)

MINIMUM STANDARDS OF PROFICIENCY FOR  
TRAINED EXPLOSIVE ORDNANCE DISPOSAL PERSONNEL

- Annexes: A. Minimum Standards of Proficiency for an Explosive Ordnance Reconnaissance Agent.  
B. Minimum Standards of Proficiency for a Conventional Ammunition Disposal Operator (including the disposal of Biological and Chemical Ammunition)  
C. Minimum Standards of Proficiency for an Improvised Explosive Device Disposal Operator  
D. Minimum Standards of Proficiency for an Underwater Munition Disposal Operator

Related Documents: STANAG 2143 EOD - Explosive Ordnance Reconnaissance/Explosive Ordnance Disposal (EOR/EOD)  
STANAG 2377 EOD - Procedure for the Management of an EOD Incident for Use when Working with NATO Forces, Police, Civil Defence and/or Other Agencies  
STANAG 2897 EOD - Standardization of EOD Requirements and Equipment to Ensure Interoperability in the NATO Environment

AIM

1. The aim of this agreement is to establish minimum standards of proficiency for trained explosive ordnance disposal operators and to provide guidance to commanders on explosive ordnance disposal operators' capabilities.

AGREEMENT

2. Participating nations agree to adopt the minimum standards of proficiency set out in Annexes A-D within their respective explosive ordnance disposal organizations. Nothing in this agreement should discourage nations from exceeding the agreed standards where this is feasible.

3. Not all explosive ordnance disposal operators need be proficient in all the categories shown at Annexes A-D, but where any operator is trained in a specific category that training should meet the minimum standard of proficiency shown in the respective Annex.

4. Minimum standards of proficiency for assistants to trained operators are not given as it is a national responsibility to provide explosive ordnance disposal operators with their intimate support.
5. Nuclear Weapon Disposal and Improvised Nuclear Device Disposal are not included in this STANAG.

IMPLEMENTATION OF THE AGREEMENT

6. This STANAG is implemented when a nation has issued the necessary orders or instructions to the Forces assigned to NATO prescribing the adoption of the minimum standards of proficiency contained herein.

MINIMUM STANDARDS OF PROFICIENCY FOR  
AN EXPLOSIVE ORDNANCE RECONNAISSANCE AGENT

Must:

1. Understand the Explosive Ordnance Reconnaissance/Explosive Ordnance Disposal organization, its tasks and its importance.
2. Distinguish explosive objects from non-explosive objects.
3. Be aware of the effects of explosives.
4. Identify munitions by type and state their hazards.
5. Be aware of the construction and function of fuzes in general and state their hazards.
6. Identify a representative selection of bombs by weight and type and determine their country of origin.
7. Be familiar with the particularities in construction of <sup>former</sup> Warsaw Pact munitions and fuzes within the limits of available information.
8. Describe precisely an item of unknown Unexploded Ordnance.
9. Estimate the size of buried Unexploded Ordnance by determining the diameter of the hole of entry and/or the size of nearby related craters.
10. Undertake a search to locate surface and buried Unexploded Ordnance.
11. Mark location of Unexploded Ordnance and its danger area.
12. Advise on initial evacuation and protective measures.
13. Recognise suspect Improvised Explosive Devices and advise on immediate actions.
14. Be aware of the categories of Explosive Ordnance Disposal incidents.
15. Complete Unexploded Ordnance reports and be familiar with reporting procedures.

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MINIMUM STANDARDS OF PROFICIENCY FOR  
A CONVENTIONAL AMMUNITION DISPOSAL OPERATOR  
(INCLUDING THE DISPOSAL OF BIOLOGICAL AND  
CHEMICAL AMMUNITION)

GENERAL

Must:

1. Understand the Explosive Ordnance Reconnaissance/Explosive Ordnance Disposal Organization, its tasks and its importance.
2. Be familiar with the categories of Explosive Ordnance Disposal incidents.
3. Be familiar with the tasks and working methods of the national Explosive Ordnance Disposal control centres.
4. Prepare an Unexploded Ordnance report and forward it in accordance with national procedures.
5. Advise and assist in determining Explosive Ordnance Disposal requirements and priorities.
6. Perform administrative Explosive Ordnance Disposal duties including maintenance of an Explosive Ordnance Disposal situation map.
7. Be familiar with the existence and contents of Allied Explosive Ordnance Disposal Publications (AEODPs).

RECONNAISSANCE

Must:

8. Carry out interviews and debrief all concerned with Explosive Ordnance Disposal reconnaissance.
9. Supervise and undertake an accurate search to locate surface and buried Unexploded Ordnance.
10. Locate bomb holes of entry by visual means.
11. Estimate the size of buried Unexploded Ordnance by determining the diameter of the hole of entry and/or size of the nearby related craters.
12. Be aware of damage radii for standard weight bombs.
13. Advise on risks to personnel and property.



14. Advise on evacuation of personnel and material.
15. Advise on the type and positioning of protective works.

ACCESS

Must:

16. Be familiar with the components of a shafting system and be able to supervise its construction.
17. Advise on and supervise the mechanical excavation of buried Unexploded Ordnance.

IDENTIFICATION

Must:

18. Be familiar with military explosives and accessories.
19. Identify munitions by type and state their hazards.
20. Identify a representative selection of bombs by weight and type and determine their country of origin.
21. Identify fuzes by type and determine their method of operation.
22. Be familiar with the particularities in construction of <sup>former</sup> Warsaw Pact munitions and fuzes within the limits of available information.
23. Describe precisely an item of unknown Unexploded Ordnance and estimate type and hazards of this munition.
24. Operate Explosive Ordnance Disposal Radiographic equipment demonstrating the ability to obtain a radiograph and be aware of the radiation hazards.
25. Interpret a radiograph.

RENDER SAFE AND/OR DISPOSAL PROCEDURES

Must:

26. Prepare, use and maintain Explosive Ordnance Disposal tools and equipment.
27. Select and use Explosive Ordnance Disposal equipment to neutralise, disrupt or remove a fuze.
28. Disrupt Unexploded Ordnance using deflagration techniques.
29. Dispose of Unexploded Ordnance by detonation or burning.
30. Select a disposal area and exercise range safety procedures during disposal operations.
31. Gain access to and remove main explosive filling of ammunition.

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BIOLOGICAL AND CHEMICAL AMMUNITION

Must:

32. Be familiar with the chemical and toxic properties of Biological/Chemical agents.
33. Define agent volatility and duration of effectiveness.
34. Use national equipment to identify free chemical agents.
35. Be familiar with the effect of chemical agents.
36. Carry out all aspects of personal protection.
37. State the influence of weather conditions and terrain upon chemical agents.
38. Use national equipment to define the extent of a chemical hazard area.
39. Understand in principle the theory of decontamination and apply selected decontamination procedures.
40. Undertake all Biological and Chemical Ammunition Disposal procedures whilst wearing specialist protective clothing.
41. Advise on the setting up and supervision of a personal decontamination station.
42. Carry out a chemical ammunition incident reconnaissance.
43. Carry out leak sealing and packaging procedures.
44. Identify chemical ammunition.
45. Select a chemical disposal area and prepare a disposal site.
46. Safely dispose of chemical Unexploded Ordnance by venting, neutralization or burning.

MINIMUM STANDARDS OF PROFICIENCY FOR  
AN IMPROVISED EXPLOSIVE DEVICE DISPOSAL OPERATOR

Must:

1. Be aware of the current threat assessment and the possible methods of attack.
2. Be aware of the responsibilities for improvised explosive device disposal.
3. Be familiar with improvised explosive device disposal tasking procedures.
4. Be familiar with the components, methods of construction and operation of improvised explosive devices.
5. Identify by type commercial demolition stores and explosives.
6. Identify by type military demolition stores and explosives.
7. Be familiar with the composition, appearance and hazards of Home Made Explosives.
8. Be aware of the special problems associated with improvised explosive devices in vehicles.
9. Operate and maintain improvised explosive device disposal diagnostic equipment.
10. Operate and maintain radiographic equipment, interpret radiographs and be aware of radiation hazards.
11. Operate and maintain remotely controlled vehicles and their associated equipment.
12. Prepare, use and maintain disruptive equipment.
13. Be able to work on improvised explosive device disposal whilst wearing an explosive ordnance disposal suit and helmet.
14. Carry out interviews and apply questioning techniques to gather all available information.
15. Advise on risks, evacuation and protective works.
16. Conduct a vehicle, room, or building search.
17. Be familiar with any specialized improvised explosive device disposal communication equipment.

18. Perform render safe procedures using remote or manual methods as necessary.
19. Be familiar with the importance of forensic evidence/intelligence and treat in accordance with national regulations.
20. Be familiar with improvised explosive device disposal documentation and reporting procedures.

MINIMUM STANDARDS OF PROFICIENCY FOR  
AN UNDERWATER MUNITION DISPOSAL OPERATOR

GENERAL

Must:

1. Understand the Explosive Ordnance Disposal/Explosive Ordnance Reconnaissance Organization, its tasks and its importance.
2. Be familiar with the categories of Explosive Ordnance Disposal incidents.
3. Be familiar with the tasks and working methods of the national Explosive Ordnance Disposal control centres.
4. Be able to prepare an Unexploded Ordnance report and forward it in accordance with national procedures.
5. Be able to advise and assist in determining Explosive Ordnance Disposal requirements and priorities.
6. Be able to perform administrative Explosive Ordnance Disposal duties including maintenance of an Explosive Ordnance Disposal situation map.
7. Be familiar with the existence and contents of Allied Explosive Ordnance Disposal Publications (AEODPs).
8. Be able to carry out the reconnaissance, identification and disposal functions detailed below and where appropriate, down to the maximum operating depth of national clearance (Explosive Ordnance Disposal) diving equipment.

RECONNAISSANCE

Must be:

9. Able to carry out interviews and debrief all concerned with Explosive Ordnance Disposal reconnaissance.
10. Able to supervise and undertake an accurate search to locate surface, underwater and buried Unexploded Ordnance by manual and electronic means.
11. Able to locate bomb holes of entry by visual means.
12. Able to estimate the size of buried Unexploded Ordnance by determining the size of the hole of entry and/or the size of the adjoining craters.
13. Aware of damage radii both on the ground and underwater for standard types of ordnance.

14. Able to advise on risks to personnel and property.
15. Able to advise on evacuation of personnel and material.
16. Able to advise on the type and positioning of protective works required for the protection of property.
17. Must have knowledge of ship construction and design with particular emphasis on damage control aspects, including the practical abilities to fight fire and control flooding in a ship environment.

ACCESS

Must be:

18. Able to advise on and supervise all Explosive Ordnance Disposal/Explosive Ordnance Reconnaissance diving tasks.
19. Fully conversant with the operation of national clearance (Explosive Ordnance Disposal) diving and remote reconnaissance equipment and their associated procedures.

IDENTIFICATION

Must be:

20. Familiar with military explosives and accessories.
21. Able to identify munitions by type and state their potential hazards.
22. Able to identify a representative selection of ordnance by weight and type and determine their country of origin.
23. Able to identify fuzes and firing devices by type and determine their method of operation.
24. Familiar with the particularities in construction of <sup>former</sup> Warsaw Pact munitions and fuzes within the limits of nationally available information.
25. Able to describe precisely an item of unknown Unexploded Ordnance and estimate the type and hazards of this munition.
26. Able to operate Explosive Ordnance Disposal Radiographic equipment, demonstrating the ability to obtain a radiograph and showing awareness of the radiation hazards.
27. Able to interpret a radiograph.

RENDER SAFE AND/OR DISPOSAL PROCEDURES

Must be able to:

28. Prepare, use and maintain Explosive Ordnance Disposal tools and equipment.
29. Select and use Explosive Ordnance Disposal equipment to neutralise, disrupt or remove a fuze.

30. Disrupt Unexploded Ordnance using deflagration or underwater explosive compression techniques.
31. Dispose of Unexploded Ordnance by detonation or burning.
32. Select a disposal area and exercise range safety procedures during disposal operations.
33. Gain access to and remove main explosive filling of munitions and on occasions dismantle them for scientific examination with minimum damage to all components.

BIOLOGICAL AND CHEMICAL AMMUNITION

(As for Conventional Ammunition Disposal Operator - Annex B Page B-3)

**RATIFICATION AND IMPLEMENTATION DETAILS**  
**STADE DE RATIFICATION ET DE MISE EN APPLICATION**

A T T I O N	NATIONAL RATIFICATION REFERENCE DE LA RATIFICATION NATIONALE	NATIONAL IMPLE- MENTING DOCUMENT NATIONAL DE MISE EN APPLICATION	IMPLEMENTATION/MISE EN APPLICATION					
			FORECAST DATE PREVUE			ACTUAL DATE DATE REELLE		
			N M A E V R Y	A T R E M R Y R E	AIR	N M A E V R Y	A T R E M R Y R E	AIR
BE +	GS 1820 of/du 28.04.86	Reg IF 7, STANAG D.O. P. pour les unités Doc VS 3/2000				3.88	3.88	3.88
CA *	2441-2389 (DAO) of/du 29.08.86		1.91					
DA +	M.204.66-S 2389/MAS ARMY - 10048 of/du 15.4.86	STANAG				6.88	6.88	6.88
FR *	Note No. 1 819/DEF/EMAT/ ETUDES/5 of/du 23.5.86	CPI NEDEX 2170/DEF/EMA/EMP2 of/du 4.5.90				7.87	7.87	7.87
GE	BMVg Füs IV 1 Az 03-51-35 of/du 16.7.86	National orders for training of EOR/EOD personnel				12.88	12.88	12.88
GR	MSG 42611/HAGS/DPPD of/du 8.5.86	STANAG						
IT	SME 1960/102.7121 of/du 8.5.86	Circ.SME-REG. 334/102.7121 of/du 22.12.89					1.87	
LU	GS 1820 of/du 28.4.86							
NL *	NAS:88.443/55.94 7/NU of/du 3.12.86	VG-VF 19 Leerstof syllaby S47,S45 & S43				3.94	3.94	3.94
NO +	MAS-29/86/B/FO/HST/ TRENINSP PKS/STANAG 2389 of/du 11.6.86							
PO +	RRN 102/DC-86 of/du 3.10.86					12.87		
SP								
TU *	GnP.P.2307-262-86/AND.D. MAS.S(2389)(1307) of/du 18.4.86							
UK	MEMO/DDWE/66 of/du 15.4.86	JSF 364 Vol. 1				1.93	1.93	1.93
*	AMCICP-SS(34-1d) of/du 23.11.87	US Armed Forces EOD Training Program				12.87	12.87	12.87

See overleaf reservations (\*)/comments (+)

Voir les réserves au verso (\*)/commentaires (+)

(Amendment 2)



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RESERVATIONS

- CA: a. CA Forces will defer implementation until additional equipment and expertise are acquired for the disposal of biological and chemical munitions.
- b. CA will not implement paragraph 33, Annex D, concerning dismantling of munitions for the purpose of scientific examination.
- FR: a. Explosive Ordnance Reconnaissance are not trained to comply with paragraphs 6, 7 and 9 of Annex A.
- b. FR does not implement paragraphs 3, 7 and 32-46, Annex B for conventional munitions disposal operations.
- c. Paragraph 19, Annex B, does not apply to military personnel responsible for disposal of improvised explosive devices.
- NL: RNLA and RNLA will not implement Annexes A and B. RNLN: Only in wartime or peacetime situations at sea, will the Navy use IED operators. Therefore Naval IED operators will not perform the tasks mentioned in paras 10 and 11 of Annex C.
- TU: TU does not implement due to insufficient special equipment.
- US: The US will not subscribe to Annex A to STANAG 2389. The US does not propose to train its Explosive Ordnance Reconnaissance Agents (EORA) to the depth required by Annex A.

COMMENTS

- BE: The BE National Implementing Document is Règlement IF "Modalités d'intervention des services de déminage de l'armée en temps de paix sur le territoire national".
- DA: a. Annex B, paragraphs 32-39 and 41; these tasks are performed by special units (not EOD Units) in the Navy and Air Force.
- b. Remotely controlled vehicles are not at the disposal of the Navy and the Air Force.
- c. Annex D will be implemented only by the Navy.
- NO: Programmes for training of EOD personnel to meet the minimum standards are in process in the armed forces. Forecast implementation dates are not presently possible.
- PO: PO NA does not implement Annex B due to personnel and equipment deficiencies. PO AR and AF will implement in due time.

(Amendment 2)